

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

A281.8
F27

THE FARM INDEX

November 1962

ECONOMIC RESEARCH SERVICE • U. S. DEPARTMENT OF AGRICULTURE



Today's farmer is supplying more and more people because output per worker is at an alltime high . . .

RECORD OUTPUT PER FARM WORKER

also in this issue:

- Freeze Drying for Cheaper Shipments, Longer Storage
- The Common Market and U. S. Exports
- Spending More Money for Clothing

ECONOMIC TRENDS

Item	Unit or base period	'57-'59 Average	1961		1962		
			Year	September	July	August	September
Prices:							
Prices received by farmers	1910-14=100	242	240	242	240	244	250
Crops	1910-14=100	223	226	229	231	229	232
Livestock and products	1910-14=100	258	251	253	248	256	266
Prices paid, interest, taxes and wage rates	1910-14=100	292	301	301	305	305	307
Family living items	1910-14=100	286	291	291	294	294	294
Production items	1910-14=100	262	266	266	268	268	271
Parity ratio		83	80	80	79	80	81
Wholesale prices, all commodities	1957-59=100	-----	100.3	100.0	100.4	100.5	101.2
Commodities other than farm and food	1957-59=100	-----	100.8	100.7	100.8	100.6	100.8
Farm products	1957-59=100	-----	96.0	95.2	96.5	97.6	100.6
Food, processed	1957-59=100	-----	100.6	100.3	100.8	101.5	103.3
Consumer price index, all items	1957-59=100	-----	104.2	104.6	105.5	105.5	-----
Food	1957-59=100	-----	102.9	102.6	103.8	103.8	-----
Farm Food Market Basket: ¹							
Retail cost	Dol.	-----	1,060	1,058	1,068	1,067	-----
Farm value	Dol.	-----	404	403	402	412	-----
Farm-retail spread	Dol.	-----	656	654	666	655	-----
Farmers' share of retail cost	Pct.	-----	38	38	38	39	-----
Farm Income:							
Volume of farm marketings	1947-49=100	123	136	151	126	144	150
Cash receipts from farm marketings	Mil. dol.	32,247	35,243	3,315	2,717	3,181	3,417
Crops	Mil. dol.	13,766	15,828	1,691	1,209	1,463	1,739
Livestock and products	Mil. dol.	18,481	19,415	1,624	1,508	1,718	1,678
Realized gross income ²	Bil. dol.	-----	39.9	-----	-----	40.5	-----
Farm production expenses ²	Bil. dol.	-----	12.8	-----	-----	12.8	-----
Realized net income ²	Bil. dol.	-----	27.1	-----	-----	27.7	-----
Agricultural Trade:							
Agricultural exports	Mil. dol.	4,105	5,030	371	402	356	-----
Agricultural imports	Mil. dol.	3,977	3,690	297	300	330	-----
Land Values:							
Average value per acre	1947-49=100	-----	³ 175	⁴ 177	³ 183	-----	-----
Total value of farm real estate	Bil. dol.	-----	³ 131.8	⁴ 133.2	³ 138.0	-----	-----
Gross National Product: ²							
	Bil. dol.	456.7	518.7	522.3	-----	-----	555.5
Consumption ²	Bil. dol.	297.3	338.1	340.1	-----	-----	357.5
Investment ²	Bil. dol.	65.1	69.3	72.4	-----	-----	77.0
Government expenditures ²	Bil. dol.	92.4	107.4	106.9	-----	-----	119.0
Net exports ²	Bil. dol.	1.8	4.0	2.8	-----	-----	2.0
Income and Spending:							
Personal income	Bil. dol.	-----	416.4	419.7	441.9	443.0	443.0
Disposable income ²	Bil. dol.	321.3	363.6	366.3	-----	-----	384.1
Total retail sales, seasonally adjusted	Mil. dol.	-----	18,234	18,131	19,682	19,551	19,351
Retail sales of food group, seasonally adjusted.	Mil. dol.	-----	4,618	4,602	4,835	4,859	-----
Employment and Wages:							
Total civilian employment, seasonally adjusted.	Mil.	-----	66.8	66.2	67.7	68.2	67.9
Agricultural, seasonally adjusted	Mil.	-----	5.5	5.2	5.1	5.2	5.1
Rate of unemployment, seasonally adjusted	Pct.	-----	6.7	6.8	5.3	5.8	5.8
Workweek in manufacturing, seasonally adjusted.	Hrs.	-----	39.8	39.6	40.5	40.2	40.4
Hourly earnings in manufacturing	Dol.	-----	2.32	2.33	2.39	2.37	2.39
Industrial Production, seasonally adjusted	1957=100	-----	109	111	119	119	119
Manufacturers' Sales and Inventories:							
Total sales, seasonally adjusted	Mil. dol.	-----	30,730	31,360	33,400	33,190	-----
Total inventories	Mil. dol.	-----	55,190	54,440	57,000	56,980	-----
Total new orders	Mil. dol.	-----	30,960	32,200	33,260	32,560	-----

¹ Average annual quantities of farm food products based on purchases per wage-earner or clerical-worker family in 1952—estimated monthly. ² Annual rates seasonally adjusted each quarter. ³ As of March 1. ⁴ As of July 1.

Sources: U.S. Department of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural

Economics and Farm Real Estate Market Developments); U.S. Department of Commerce (Industry Survey, Business News Reports, Advance Retail Sales Report and Survey of Current Business); and U.S. Department of Labor (The Labor Force and Wholesale Price Index).

THE AGRICULTURAL OUTLOOK

The market value of the nation's goods and services edged up \$3.5 billion the third quarter over the second. This is about half the quarter-to-quarter gain earlier this year. For 1962 as a whole the Gross National Product may total 6 or 7 percent above last year. Preliminary estimates for the third quarter place the Gross National Product at the slightly higher annual rate of \$555.5 billion. Increased purchases by consumers and government contributed to the smaller quarterly gain. Investment outlays and net exports declined a little from the second to the third quarter.

Industrial production during the third quarter was 1 percent higher than in the second, and 6 percent above a year earlier. Steel output increased somewhat in the third quarter after declining in the second. Auto production was seasonally low in August but gained momentum in September after the new model changeover. New car assemblies continued to rise in October in response to brisk public demand. Construction outlays increased by about \$2 billion, annual rate, or more than 3 percent from the second to the third quarter. Commercial, industrial and government construction went up. Housing starts for the third quarter were slightly below the record of the second.

Employment increased by 214,000 workers from

the second to the third quarter as production increased. But the increase in the number of employed was smaller than the increase in the labor force. Unemployment, seasonally adjusted, rose to 5.8 percent in August and September compared with an average of 5.5 percent in the second quarter.

Personal income in the third quarter held steady at about \$443 billion, annual rate, up \$3 billion from the second quarter. Consumer expenditures increased \$2.6 billion from a quarter earlier. Further gains were realized during the third quarter in consumer outlays for services and household operations. Moderate rises occurred in retail sales but some weakness appeared in September.

Cash receipts from farm marketing were \$24 billion for the first three quarters, up nearly 2 percent from the same period last year. The increase was greater for crops than for livestock, and among the crops, cotton showed the greatest gain in receipts. Receipts were up somewhat for corn and soybeans during the period, but were down considerably for wheat because of sharply reduced marketings.

For livestock and livestock products, receipts from cattle and calves were up considerably. Those for eggs were down. Receipts for milk and hogs were about the same in both periods.

Prices received by farmers averaged more than 1 percent higher during January–September than the same period in 1961. Farm product prices increased nearly 5 percent into September from a low in June 1962. The Parity Ratio for the first three quarters was 80—the same as last year.

Crop prices for the first nine months were above 1961 by more than 2 percent. Food grain prices averaged about 9 percent higher and oil crop prices averaged 3 percent less during the third quarter than a year earlier.

Livestock and livestock product prices rose more than seasonally for the third quarter and were 5 percent higher in mid-September than a year ago. But February–July lows pulled down the average for the nine months to an average level about equal to a year earlier. The meat animal prices for the third quarter were more than 3 percent above the same period in 1961. The poultry and egg price index for the third quarter was up about 2 percent from 1961.

Total farm output probably will be about the same in 1962 as 1961. Cotton, tobacco and sugar

CONTENTS

	<i>Page</i>
THE FARM	5
MARKETING	11
THE FOREIGN MARKET	15
THE CONSUMER	21
RECENT PUBLICATIONS	23

The Farm INDEX is published monthly by the Economic Research Service, U.S. Department of Agriculture. November 1962. Vol. 1, No. 2.

The contents of this magazine are based largely on research of the Economic Research Service and on material developed in cooperation with state agricultural experiment stations. All articles may be reprinted without permission. For information about the contents, write the editor, The Farm INDEX, Management Operations Staff, U.S. Department of Agriculture, Washington 25, D.C.

Use of funds for printing this publication approved by the Director of the Bureau of the Budget, May 24, 1962. Subscription orders should be sent to the Superintendent of Documents, Government Printing Office, Washington 25, D.C. Price 20 cents (single copy). Subscription Price: \$2.00 per year; 75 cents additional for foreign mailing.

EDITOR, Theodore Crane; ASSISTANT EDITOR, Story Easterling; STAFF EDITORS, William T. Schanger and Marilyn S. Harrison; PRODUCTION EDITOR, Lilla Dunovant McCutchen.

crop production, as of October 1, was expected to be greater in 1962 than last year. Wheat output is down 11 percent. Smaller production is indicated for vegetable and oil crops. Meat animal production, according to October 1 indications, may be slightly greater in 1962 than a year earlier.

COMMODITY HIGHLIGHTS

Feed Grains—The feed grain supply for 1962-63 is estimated at 210 million tons, 7 percent below the 1961-62 supply. Production is near 1961, but the carryover into 1962-63 is 17 percent smaller than a year ago, the first drop in carryover stocks in 10 years.

Domestic consumption in 1962-63 is expected to total a little above the record 1961-62 level, while exports probably will be a little lower due mainly to large harvests abroad. Production is expected to again fall below total 1962-63 requirements indicating a further reduction in feed grain stocks in 1962-63. The 1962 feed grain price supports are at the same levels as last year. During the 1962-63 marketing year, CCC again will have substantial quantities of feed grains to be sold for the redemption of certificates under the 1962 Feed Grain Program.

Wheat—Wheat supplies in 1962-63 total 2,405 million bushels, down about 250 million from a year earlier, reflecting reductions in both carryover and production. With less exports, assuming total disappearance at 1,205 million bushels, there would be a carryover July 1, 1963, of about 1,200 million. This carryover is 100 million below a year earlier and the second consecutive reduction. Under the 1963 program, acreage probably will be up.

Soybeans—The 1962-63 supply of soybeans is placed at about 730 million bushels, or 4 percent more than in 1961-62. The increase is attributed to larger beginning stocks in October 1 which more than offset the small drop in output.

As of mid-October, the season average price received by farmers for 1962-crop soybeans is expected to approximate the \$2.28 per bushel in 1961.

Dairy—Milk production in 1963 may increase due to only moderate declines in milk cow numbers and a continuing rise in production per cow. Total consumption of dairy products in 1962 is expected to be above last year, chiefly because substantial quantities of butter, cheese and nonfat dry milk are being distributed from USDA stocks through welfare and school lunch programs. Storage stocks at the end of 1962 will be high, but under the record 13,720

million pounds of milk equivalent at the end of 1954.

Poultry and eggs—October-November egg production is expected to be a little higher than in 1961. Egg prices for the remainder of the year may hold close to last year's level.

Broiler prices between May and October were higher than a year ago. Eggs set for broiler chicks in August and September indicate much larger broiler supplies in November and December.

Despite a 17 percent reduction in turkeys raised in 1962 from 1961, total supplies likely will be down only about 6 percent because of the record-large carryover of frozen turkeys from 1961.

Livestock—Fed cattle prices improved during the third quarter reaching the highest level in three years. Prices edged lower in October but continued well above a year earlier. October 1 inventory of cattle and calves on feed in 26 states of 6,059,000 head was up 8 percent from a year ago. Most of the increase was reported in the Western states. Hog prices rose about 7 percent during the third quarter, reflecting reduced slaughter supplies. As hogs began coming to market in greater abundance after mid-September the price dropped accordingly. Late October prices were near those a year earlier.

Cotton—The 1962 crop, as of October 1, was estimated at 14.7 million running bales, about 380,000 bales larger than in 1961 and the largest since 1953. The national acreage allotment for upland cotton for 1963 has been announced at 16 million acres. In addition, the Agricultural Adjustment Act provides for 310,000 acres national acreage reserve usable for minimum farm allotments. The acreage allotment for extra-long-staple in 1963 is 149,880 acres, nearly 50,000 acres larger than 1962.

Tobacco—Supplies of flue-cured and burley for 1962-63, the two big-volume types of tobacco—will be around 2 percent larger than for 1961-62. Consumption of cigarettes and cigars in 1962 is expected to top 1961 and further increases seem likely in 1963. The foreign market—outlet for 25 to 30 percent of U.S. tobacco—may take around 4 percent more in calendar 1962 than 1961.

Fruit—Citrus fruit production is expected to continue in large volume over the next few years. First official estimates for 1962-63 indicate heavier orange and grapefruit crops in Florida and larger production of navel and other oranges in California than in 1961-62. In mid-October, packers' stocks of Florida orange juice, both frozen concentrate and canned, were much larger than a year ago. Supplies of canned deciduous fruits also were large then.

*Today's farmer is supplying more and more people
because output per worker is at an alltime high*

RECORD OUTPUT PER FARM WORKER

U.S. farmers are producing more food and fiber per hour of work than ever before.

New ERS figures show that farm output in 1961, at 1 per cent above 1960, hit a new record level. This record was set with 4 per cent fewer man-hours of work than in 1960. As a result, farm production per man-hour last year rose 4 per cent to a new high.

Last year's peak marked the continuation of trends evident over the last half century. The number of man-hours of farmwork was at its highest in 1918 when it reached 24 billion. Since then it has declined at an increasing rate. The 9.6 billion man-hours used for farming in 1961 was 5.5 billion less than in 1950, 10.9 billion less than in 1940 and 14.5 billion less than the 1918 peak.

The number of man-hours has decreased for a number of reasons.

Among the more important are greater mechanization and fewer but bigger farms and farm enterprises.

Last year, work on crops took almost half the total man-hours—4.5 billion. Care and handling of livestock and poultry and their products accounted for another 4 billion man-hours. The remaining billion were used to repair machinery, build fences, and handle other overhead operations.

While the number of man-hours drops, total farm output climbs steadily. Last year's record was nearly a fourth above 1950 and more than double the level of half a century ago.

The 1961 production record came on the smallest acres of crops harvested since before World War I—20 million less than in 1960 and 40 million less than a decade earlier. Most of the drop from 1960 re-

sulted from participation of farmers in the Feed Grain Program—which reduced corn acreage by 18 per cent and grain sorghum acreage by 29 per cent. Largely because of this cut in acreage, crop production in 1961 fell 2 per cent below 1960, even though production per acre averaged 3 per cent above 1960. Increased livestock production, offsetting the drop in crops, pushed total farm output to a new high.

As the number of man-hours used in farm work decreases and total farm output rises, farm production per man-hour keeps climbing. The 4 per cent increase from 1960 to 1961 actually figures out to something less than the average annual rate of increase over the last decade.

The speed of the increase is shown by the following comparison: In 1959-61 farm output per man-hour averaged 87 per cent higher than 10 years earlier; nearly 370 per cent

FARM PRODUCTION PER MAN-HOUR (1957-59 = 100)

Year	All farm output ¹	LIVESTOCK AND PRODUCTS				CROPS									
		All live-stock & products	Meat animals	Milk cows	Poultry	All crops	Feed grains	Hay & forage	Food grains	Vegetables	Fruits & nuts	Sugar crops	Cotton	Tobacco	Oil crops
1910	24	43	67	40	29	25	16	33	12	48	37	26	23	62	14
1915	27	47	67	42	29	28	17	33	16	49	49	26	24	61	13
1920	27	44	69	42	29	28	18	33	14	51	53	26	25	59	13
1925	27	46	71	45	31	28	19	33	15	51	50	28	25	59	17
1930	29	47	73	46	31	28	17	31	22	52	53	32	25	57	17
1935	31	44	70	44	33	32	19	35	18	56	64	30	29	59	19
1940	37	50	76	48	34	38	23	40	26	62	71	38	36	64	22
1945	47	58	80	56	40	47	31	51	36	70	74	36	39	66	29
1950	61	68	84	67	48	64	51	75	51	90	88	55	53	75	60
1955	81	85	94	82	72	80	69	85	64	102	103	77	82	93	74
1960	115	113	107	115	127	114	124	113	131	107	97	109	117	109	114
1961 ²	120	122	110	123	145	118	138	119	125	112	103	110	127	112	125

¹ Man-hours in ratio includes labor used on crops, livestock, and on overhead.

² Preliminary figures.

Cropland and Production Per Acre

Year	Total land ¹	Harvested	Production per acre
	Million acres	Million acres	'57-'59=100
1910	330	317	68
1915	348	332	74
1920	368	351	74
1925	370	351	69
1930	382	360	64
1935	377	336	66
1940	368	331	76
1945	372	345	82
1950	377	336	84
1955	378	333	91
1960	355	317	109
1961 ²	340	297	112

¹ Land from which one or more crops were harvested. ² Preliminary figures.

Man-hours of Farm Labor

Year	Total farm work ¹	All live-stock	For all crops
1910	22,547	6,576	12,589
1915	23,244	6,987	12,770
1920	23,995	6,990	13,406
1925	23,800	7,814	13,046
1930	22,921	7,197	12,286
1935	21,052	6,945	10,949
1940	20,472	7,023	10,378
1945	18,838	7,045	8,967
1950	15,137	5,945	6,922
1955	12,795	5,139	6,001
1960	9,974	3,943	4,738
1961 ²	9,588	3,943	4,514

¹ Includes labor used on crops, livestock and on overhead. ² Preliminary.

higher than a half century earlier.

Unlike the long-time trend, production per man-hour increased more for livestock than for crops between 1960 and 1961. Over the last two decades crop production per man-hour has almost tripled while livestock output per man-hour has little more than doubled.

The ability of farmers to produce more products with fewer workers can be illustrated in another way.

Last year, the average farm worker produced enough food, fiber and tobacco for himself and more than 26 others. This was seven times the number of persons supplied in 1820. But over half of this increase came in the last decade.

As fewer and fewer farm workers are required to produce the nation's food and fiber, more rural people have been released for industrial employment. Last year, farm workers made up less than 4 per cent of the total population compared with 8 percent in 1940 and 25 per cent in 1820.

Although most of this decrease results from improved technology on the farm, some of it simply means that many jobs previously done on the farm are now done by urban workers.

For example, much of the livestock feed is now ground, mixed or

otherwise prepared in nonfarm feed mills. Formerly most of this work was done on the farm. Farm power is another example. Farm workers used to spend considerable time caring for horses and mules. Now, farm power is a matter of tractors, trucks and automobiles.

Price Series in Parity Index Now Issued in Single Report

All the basic price series going into the parity index are now available in one publication for the first time. The report is "Prices Paid by Farmers for Commodities and Services, United States, 1910-1960" (Statist. Bul. 319).

The bulletin is one of two new publications of the Statistical Reporting Service containing statistics on agricultural prices and indexes.

The other publication, "Agricultural Prices, 1961 Annual Summary" (Pr 1-3 (62)), is the third annual bulletin summarizing the latest available monthly, seasonal and annual estimates of prices received for 32 types of crops and 13 categories of livestock, poultry and poultry products. This publication also brings to date by states the series on prices paid by farmers in Statistical Bulletin 319.

Study Shows Land Reserve Changes Farming Patterns

When farmland comes out of the Conservation Reserve program, how is it used?

That's the question economists recently asked 150 county office managers of USDA's Agricultural Stabilization and Conservation Service throughout the nation by mail.

According to their reports, about 45 per cent of the 2.5 million acres released from C. R. contracts in December 1961 was slated to remain in grass. The rest was going to be cropped in 1962.

To get more detailed answers, the survey team conducted personal interviews with farmers in six counties with a large number of expiring contracts. Two counties were in North Dakota, one in Minnesota and three in Texas. Over 550 farmers were contacted.

Land Remains in Grass

Findings indicate that, though 40 to 50 per cent of the land would remain in grass in the counties with more livestock farms, the figures dropped to 10 to 20 per cent in the counties with more crop farms.

Feed grains are expected to be the major crop produced on the land returning to crops.

Should new land retirement programs be offered at diversion rates equal to or slightly above the rates of expiring contracts, farmers said they would retire from 43 to 133 per cent of the land released in 1961 and 1963.

Farmers with livestock favored a land retirement program which would allow grazing at a reduced payment rate.

Crop Histories Important

On the other hand, farmers in the survey indicated their interest in a diversion program would fall off sharply if they were asked to surrender their crop histories.

California Water Costs May Rise Under New Irrigation Price Plans

The small-scale cotton farmer in California's San Joaquin Valley may at long last find he has all the irrigation water he needs—but it may cost him more if the proposed California Water Plan goes into effect.

The estimated average price of surface or well water for irrigation is \$5 per acre-foot at present. Prices under the Feather River Project may raise this to \$20 to \$25 per acre-foot in Fresno, King and Kern Counties where the study was made.

The farms surveyed were general crop and cotton operations on the eastern side of the San Joaquin Valley. They ranged in size from 80 to almost 400 acres with varying acreages under irrigation. Typical crops are cotton with alfalfa, corn and barley. Soils, labor, machinery, crops and irrigation systems on the farms were analyzed to determine costs.

Larger farms averaging 320 acres were the most efficient in costs and operation. They were better able to use labor and equipment than the smaller farmers. Farms in the 320-acre group sold around \$60,000 worth of products yearly.

Operators of these larger farms are better able to pay the higher prices for water and still profit because their average costs per unit of production are lower. However, considering the upward trend in costs for production items, taxes and other costs, as well as fluctuations in farm prices, the income position of farmers in the Valley will be adversely affected as the water charges increase.

If the plan limits acreage that can be irrigated, as is now proposed, both large and small farmers will find it hard to take full advantage of their farm size. Under consideration also is a surcharge on the amount of water above what is needed to irrigate 160 acres of cropland.

NEW FIGURES GAUGE SOURCES OF FARM INCOME

A new statistical series has been developed by ERS to measure the total flow of income from all sources to persons on farms. Called Personal Income of the Farm Population, it provides a comprehensive measure of the ability of farm people to share in the nation's rising level of living. Per capita figures from the new series can now be compared directly with personal income estimates for the nonfarm sector.

Two major components make up personal farm income—income from farming and income from nonfarm sources. Personal income from farming includes all net income of farm operators living on farms, plus farm wages, salaries and other labor income of hired workers who live on farms.

Nonfarm sources of personal income consist of wages and salaries earned off the farm by farmers and their families. Nonfarm business and professional income, rents from nonfarm sources, dividends and royalties and transfer payments such as Social Security and unemployment compensation also are included. An imputed income value of the bank services farmers receive with their demand deposit accounts is added.

Social Security contributions are subtracted from income whether farm or nonfarm.

1961 Personal Income Up

The 1961 personal income for the farm population was \$20.3 billion, \$710 million more than in 1960. Nonfarm personal income was \$394 billion and farm and nonfarm together totaled \$414.3 billion.

Last year's personal income figure for farmers included \$13.3 billion from farming—\$940 million higher than in 1960. With the exception of 1958, this is the highest personal income from farming since 1953. Personal income from nonfarm sources in 1961 was \$7 billion—\$230 million less than a year earlier.

New Farm Definition Used

When total personal income for the farm population is divided by the number of farm residents, the result is per capita personal farm income. The farm population figure changed considerably in 1961 with the adoption of the new and more restrictive definition of a farm in the 1960 census. The result was a farm population estimate in 1960 of 15.6 million compared to 20.5 million under the old definition.

With a revised figure for the farm population, per capita personal income for farm residents came to \$1,373 from all sources in 1961. This was the highest yet and 10 per cent above 1960. Of the total, \$899 came from farm sources and \$474 from nonfarm sources.

In comparison, per capita nonfarm income went up \$36 from 1960 to \$2,345 in 1961. Per capita personal income of the farm population was only 58.6 per cent of the nonfarm average last year. However, except for 1948 and 1951, this was the highest percentage since the personal income series began in 1934.

PER CAPITA PERSONAL INCOME

Year	Farm population		Nonfarm population
	From farm	All sources	
	Dollars	Dollars	Dollars
1951	754	1,043	1,765
1952	723	1,024	1,854
1953	693	1,008	1,919
1954	691	999	1,889
1955	638	960	1,997
1956	642	993	2,103
1957	690	1,066	2,166
1958	805	1,197	2,165
1959	713	1,144	2,276
1960	791	1,255	2,309
1961	899	1,373	2,345

GENERAL REVENUE PER PERSON IN THE GREAT PLAINS, 1960

States	Total	From federal government	All general revenue from own sources	Taxes		Charges and miscellaneous general revenue
				Property	Other	
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Colorado	347	54	292	119	112	61
Kansas	303	44	259	124	94	41
Montana	351	78	273	126	93	54
Nebraska	254	38	216	120	54	42
New Mexico	324	75	249	43	131	74
North Dakota	350	76	275	105	93	77
Oklahoma	280	56	223	57	121	46
South Dakota	312	64	249	113	85	51
Texas	247	40	207	78	84	44
Wyoming	470	150	320	124	111	85
Average:						
United States	281	39	242	91	110	41
States	324	69	256	101	98	58

GREAT PLAINS TAXES SHOW REGIONAL PATTERN

With fewer people on more land than most other states, the 10 Great Plains states share a pattern of taxation that more often than not distinguishes them as a group from the rest of the country.

With about one-third of the land area of the continental United States, the Plains states had total general revenues of about \$5.8 billion in 1960, or roughly 12 per cent of the total for the country. Some \$1 billion of the total for the Plains states came from federal sources.

The Great Plains states are North and South Dakota, Montana, Nebraska, Wyoming, Colorado, Kansas, Oklahoma, New Mexico and Texas.

Each of the Plains states derived a larger proportion of general revenues from federal aid than the U.S. average of 14 per cent. The percentage for Nebraska, for example, which had the lowest percentage, was 15 per cent. Wyoming, with 32 per cent of its revenue coming from federal sources, was second only to Alaska among the 50 states.

The Plains states as a whole also rely more heavily on charges and miscellaneous revenues than does

the rest of the country. The average for all 10 states was 17 per cent of total general revenue supplied by charges and miscellaneous revenues such as oil and mineral royalties. For the United States as a whole, the figure is 15 per cent. Only Kansas and Montana equalled, or were slightly under, the national figure.

Another characteristic of the Plains states is their reliance on property taxes. Although the 10 states, as a whole, draw less of their general revenue than the U.S. average from their own tax sources, this revenue is heavily weighted with property taxes, with three exceptions. For the nation as a whole, state and local nonproperty taxes produce some 20 per cent more revenue than does the property tax. In the Plains region, the two sources are about equal.

Montana, South Dakota and Kansas, in that order, were topmost in the nation in property taxes per \$1,000 of personal income. Nebraska ranked close after them. Wyoming and Colorado also were substantially above the U.S. average.

However, in the three southern Plains states—Oklahoma, New Mexico and Texas—other tax sources overshadowed the property tax. These three states were below average in property taxes per \$1,000 of personal income.

Tourist Trade Triples in Ozarks; Boom May Mean 85% More Jobs

Ozark farmers have a new crop—tourists.

The tourist trade in 31 counties in the Ozark area leaped from about \$26 million in 1948 to over \$72 million in 1960, according to recent studies of rural areas development by the University of Missouri and ERS. The report indicates that the tourist trade may be worth close to \$125 million in another 10 years.

Should this prospect materialize, tourists would account for an estimated 40 per cent of the gross sales of all retail and service firms in the area. The value of their purchases would be 10 per cent more than the value of all locally grown farm products.

Tourists Bring Jobs

With such a boom, the tourist trade could absorb something like 85 per cent more workers—most of them would be from the local population.

It is the retail and personal service firms that profit most from the tourist trade, and more than 72 per cent of these businesses were operated by people who were raised on farms or who had operated farms, the survey showed.

In 1959, about \$2.5 million worth of locally produced goods was sold through retail stores to tourists. About three-fifths of that figure was income from farm products.

Most of the retail businesses were relatively small. More than 15 per cent of the operators reported gross sales of less than \$10,000. Another 15 per cent were in the \$10,000 to \$20,000 group.

More Money From Recreation?
Prudence Needed for the Job

Outdoor recreation can be good medicine for ailing farms, but it isn't an economic cure-all, and it shouldn't be taken without reading the prescription on the label.

A few of the more important cautions are:

- Though the nation to a man seems bent on rediscovering the great outdoors, most families want to rough it, for example, with radios, refrigerators, indoor plumbing, electric cookstoves and soft mattresses.

- It's easy to confuse what people really like to do—and are willing to pay for—with what they say they like—and don't buy. A recent survey listed 11 outdoor activities, from the most to the least often undertaken. They are: taking a drive through the country, picnics, swimming or going to the beach, fishing, boating and canoeing, hunting, hiking, camping, nature or bird walks, horseback riding and, finally, skiing and other winter sports.

- Developers frequently forget that a mediocre enterprise will outdraw a better one if it is easier to get to. Awesome scenery, a healthful climate and spectacular fishing alone don't add up to dollars in the bank. Good highways, plenty of traffic and a little promotion help, too.

The Money Trees

The small farmer, with few ways to add to his income, is looking for other ways to make money out of his land. Developing his forests for outdoor recreation may be one way to do it.

"Forest Recreation for Profit," (AIB-265), a new publication by the Forest Service, offers some self-help suggestions along this line. For a free copy, write to U.S. Forest Service, Washington 25, D.C.

- Any recreation area that limits its attractions to one activity, fishing for example, automatically cuts out the rest of the family trade—and very likely the fisherman, too. On the other hand, with adequate housing for the family, activities for the small fry and a degree of relaxation for the wife, dad is free to catch the fish.

FARM LIVING HAS IMPROVED THROUGHOUT U.S.

Farms in Arizona, California, Nevada and Iowa have the highest levels-of-living, according to the latest available indexes. Farms in Mississippi, Arkansas, Alabama and West Virginia ranked the lowest when their agricultural counties were averaged. However, living scales have improved to some degree on farms all across the country.

These facts were revealed by an index for counties based on factors related to levels of living of farmers in 2,599 counties or combinations of counties containing at least 500 farms. Five items were included in the formula: Value of sales per farm, value of land and buildings and family ownership of telephones, home freezers and automobiles. Measurements were for 1950 and 1959.

However, when counties were ranked individually, seven of the 10 highest ranking counties were in California and the remaining three in Arizona. The 10 near-average counties were scattered throughout the country. Two of the 10 lowest ranking counties were in West Virginia and Mississippi. The remaining eight lowest counties were in Kentucky, North Carolina and Virginia.

The lowest net income from farming for the top 10 counties was estimated over \$18,000 per farm in 1959. For the average counties, incomes ranged from \$1,800 to \$3,600. Nine of the 10 counties with the lowest level-of-living indexes had incomes per farm of less than \$1,000.

- The man who runs a recreation spot has the usual problems of a businessman, and a few special ones of his own. His biggest headache, according to a survey of managers, is vandalism. Trash and the danger of fire come next and then overcrowding. Financing his place is fifth on the list of problems the manager faces.

Despite the wide differences in income, specialists found the high and average counties differed only slightly in the proportion of farms reporting home freezers—both about 6 out of 10—and automobiles—both about 8 out of 10. However, roughly 9 out of 10 farm homes in the top counties had telephones compared to 7 out of 10 in the average ones. Less than a third of all farms in the 10 lowest counties had cars—4 out of 5 farm operators in the other two categories owned automobiles.

With such low levels-of-living, all but one of the low-index counties lost population from 1950 to 1959. Usually the loss was substantial. At the same time, the top 10 counties increased their population by anywhere from 7 to 100 per cent.

Between 1950 and 1959, the number of farms was reduced in all the counties—but the lowest ranking counties lost the most. However, on the average the remaining farms grew in size during the same period. With a single exception, the average farm in the lowest ranking counties contained less than 100 acres. The typical farm in 4 out of 10 of the highest ranking counties was 1,100 acres or more.

Counties that rated high and average on the index account for most of our farm production. High-yield, irrigated cash crops such as vegetables, citrus fruits and cotton were the rule in the top-ranked areas. Alfalfa for hay and meal and dairying were also important.

REAPPORTIONMENT MAY ADD TO RURAL SERVICES

When cities get more power in state legislatures, many people assume that rural areas will automatically suffer.

But reapportionment of legislative bodies might, paradoxically, result in rural communities having more services as well as increased expenditures. This is the observation of a specialist in farm economics for ERS.

Take local rural services as a case in point.

By and large the city people who push for reapportionment at the State House are the same people who urge that standards in rural areas be raised. Chances are that legislation that results from reapportionment will reflect a willingness to raise bonded indebtedness and improve salaries for teachers and other public officials.

The net effect in rural areas would be to increase rather than decrease local government activities and expenditures.

Grants-in-aid and shared taxes are other areas where town and country might be expected to clash. Yet state grants, on the whole, have been proposed largely by city groups arguing the inability or unwillingness of communities throughout the state to provide adequate services. It is unlikely that the city groups would now reverse themselves in providing a minimum level of services such as education and welfare throughout the state.

The dissatisfaction of cities with existing highways is another example. Cities were largely instrumental in setting up the Interstate Highway System. But when cities got what they wanted for the Interstate System, there was no cutback in funds for rural highways.

Thus, history to date suggests that when the city gets more money, the country gets no less. In fact, rural communities may get more.

Cities, for instance, have an immediate interest in the educational

level of the people moving into metropolitan areas from the country. Here again, rural educational budgets at least are not apt to be cut. Rather, they might well be raised.

But if history gives us a fairly good idea of what the rural communities can expect in the way of funds, it is less clear as an indicator of the trend in local government reorganization.

The signs so far point to substantial opposition on the part of city groups themselves to anything other than voluntary government reorganization. The recent shift in policy by the associations of California counties and cities away from support of multi-purpose districts illustrates the point.

However, some forms of government reorganization have been more

attractive to state legislators—and voters—than others.

On the least-likely-to-succeed list is the regrouping of counties and other local government units. There have been as yet virtually no consolidations of counties.

School districts, on the other hand, are another matter. The 1962 Census of Governments reported a decrease of some 32,000 school districts between 1952 and 1962. Almost half of the decrease occurred since 1957.

When it is a question of who runs activities like welfare work, the trend so far has been for joint state-local control. More often than not, local governments have kept the administration in their own hands, while the states have provided part of the funds as well as general supervision and inspection for the programs.

New Superhighways Cut Through Farming Units, Cause Reorganization of Buildings and Land Use

Superhighways spreading across the country disrupt, cut up or even eliminate farms in their paths.

The extent to which the sale of land for highway construction affects operations was the subject of a recent study of farms along a 33-mile section of Interstate 35 in south-central Iowa.

Chances are, according to the research, some farms will be cut in two, since the new rights-of-way do not necessarily follow section lines. Buildings may also have to be replaced or moved out of the right-of-way. The farmer may thus have to reorganize his farm entirely to create an efficient working unit.

Rural land has been taken for new highways at the rate of approximately 110,000 acres per year during the last decade and the present rate is higher. Almost 21 million acres of rural land in the United States are already devoted to highways and roads. Of the 1.5 million

acres of land to be taken for Interstate System rights-of-way in the next 10 years, three-fifths will be farmland. In the Iowa study area, the researchers found that Interstate 35 took an average of 55 acres per mile for right-of-way. Farms along the route were initially reduced in size roughly 10 per cent.

Sometimes highway construction has a direct effect on the number of farms. In the area surveyed, 11 of 80 farms ceased operation within a three-year period; highway construction appeared to be a major reason for the disappearance of eight of the farms.

The report points out that state highway agencies can reduce the disruptive effects of construction and help farmers adjust to problems that cannot be avoided. Some of the ways to minimize problems are careful highway location and design, careful appraisal procedures, and policies which help the farmer reorganize his operation.

FREEZE-DRIED PRODUCTS

Now on the Market

Meats

Beef cubes
Beef steaks
Ham
Ham and eggs
Hamburger
Pork chops

Poultry

Chicken cubes
Eggs, scrambled

Seafood

Crab meat
Shrimp

Vegetables

Asparagus
Green beans
Green peas
Mushrooms

Not available in retail stores; but sold to institutions, food processors and specialty-food manufacturers.



With Market Potential

Meats

Beef slices
Ham patties
Ham slices
Pork slices
Sausage

Vegetables

Broccoli
Brussels sprouts
Onions, raw

Seafood

Fish cakes
Fish sticks

Fruits

Apple slices
Apple sauce
Apricot slices
Blueberries
Boysenberries
Cherries
Peach slices
Raspberries
Strawberries

*Freeze-drying can reduce weight by 90 per cent;
storage life is as much as two years*

FREEZE-DRYING READY FOR RAPID DOLLAR GROWTH

Freeze-drying, today's infant in food processing, is expected to be a one-half to one billion-dollar-a-year operation by 1970.

Even by next year, economists expect \$15 million in sales—a 15-fold increase over the rate this year.

Introduced commercially in the last three years, freeze-drying, according to an industry definition, is "a unique food preservation process that removes moisture from frozen foods without appreciably changing the shape, color, or taste of the product. Cellular structure remains intact."

Freeze-drying is accomplished by sealing already frozen foods in special drying cabinets, where air is pumped out and low-level heat is slowly applied. As the temperature rises, the ice in the frozen product is vaporized until 98 per cent of the moisture is removed. Nitrogen is put into the chamber to replace the

oxygen in the food. This inert gas retards spoilage. Once this is done, the product is ready for packaging. Freeze-dried foods are sponge-like, with interior sacs that aid in rehydration.

A point to note is that the finished product is dehydrated, not frozen. As such, it may be stored at room temperature for as long as two years.

Water and oxygen are attracted to freeze-dried products. This is a help in rehydrating the foods, but unfortunately, raises several problems in packaging. Products must be carefully packaged either in cans or in laminated polyethylene or foil pouches. A small amount of nitrogen is injected in the container to prevent the growth of bacteria and inhibit spoiling. Finally, the container is sealed, airtight.

Freeze-dried products can be made ready to eat simply by add-

ing liquid. And there is no reason why the liquid must be water. For example, strawberries could be rehydrated with syrup, and fish with water to which lemon juice has been added.

Another advantage of the freeze-dried product is its lightness. Freeze-drying reduces weight by 70 to 90 per cent. For example, 100 pounds of frozen, raw, deboned chicken meat would be reduced to a shipping weight of 29 pounds. One hundred pounds of mushrooms would be reduced to 11 pounds for shipping.

One drawback of freeze-dried foods is appearance. Many foods, especially meats, look unappetizing without their natural moisture. However, when the foods are rehydrated, most return very closely to their normal appearance.

Of the foods which take well to the process, chicken and turkey among the meats appear to have the greatest future. Shrimp and crab, already market tested, are assured successes. Among vegetables, mushrooms, asparagus and members of the cabbage family freeze-dry well. Blueberries, strawberries, raspberries, pineapples, apples, apricots and other fruits are suited to the process. Items such as fish cakes, sausages, stews, soups, puddings and other desserts may have a market potential. Seven plants are now in operation producing products.

In general, any food with a high protein or starch content freeze-dries easily; those high in fat and sugar, rather poorly. Foods with high water content and loosely formed cell structures, such as watermelons or tomatoes, are quite easy to freeze-dry, but it is virtually impossible to reconstitute them to their original form.

Potential markets for freeze-dried food products are many and varied. Freeze-dried shell fish, fish, meats, and vegetables, for examples, may be used in restaurants, schools, hospitals and other institutions. Secondary food-processing plants

already use freeze-dry ingredients in soups, and could use them in preserves, bakery products, and such desserts as gelatin, puddings and ice cream. Freeze-dry products are also being used in such foods as camp packs and military rations.

Military Biggest Buyer

The Armed Forces are one of the biggest buyers of freeze-dried products. This year, or early in 1963, the Army and Air Force plan to purchase 500,000 pounds of freeze-dry meat, poultry and seafood. Other items for the mobilization reserve supplies should result in a continuing yearly demand for 1.75 million pounds.

At present, retail markets do not carry freeze-dry products other than camping foods, and those which are part of secondary processed items. However, this market will develop in years to come.

Freeze-drying may have its greatest impact in specialty food items. For example, instant coffee dehydrated by this method is said to yield a product with trueness of flavor unequalled by any other drying method. Techniques also have been developed to dry such seasonings and spices as parsley, thyme, tarragon, wintergreen, orange and lemon peel, oregano and members of the onion family.

Costs Still High

Costs of processing are still relatively high in the freeze-dry industry. Although exact costs are not yet known, people in the freeze-dry industry estimate costs in the future may range somewhere from 2 to 14 cents per pound of water removed. The uncertainty about costs, at present, is due to the fact that the industry is new and that plants in operation are small. Then, too, the industry is in the experimental stage and the volume, small though it is, has to carry a large burden of overhead in terms of research and development.

GREATER EFFICIENCY NEEDED FOR BREAD ROUTES

Greater efficiency in bread distribution systems is needed if baker-wholesalers intend to remain competitive with other bread producers, according to a recent study.

The baker-wholesaler's margin accounts for 56 per cent of the retail price of a loaf of bread. A significant part of the margin is the cost of getting the bread from the bakery to food stores. Since 1947, the margin has almost doubled.

In the same period, wage rate costs to baker-wholesalers have increased almost 200 per cent. But because of delivery systems designed years ago to meet the needs of the neighborhood grocery store instead of today's large food stores, the productivity of the deliveryman has not been able to keep pace.

Under the present system of distribution, driver-salesmen provide many time-consuming services in stores during delivery operations. A large part of their time is spent in handling sales and in setting up rack displays involving a large number of stops but only a small volume of merchandise in competition with many other bakeries.

To improve efficiency, economists recommend that ways be found to

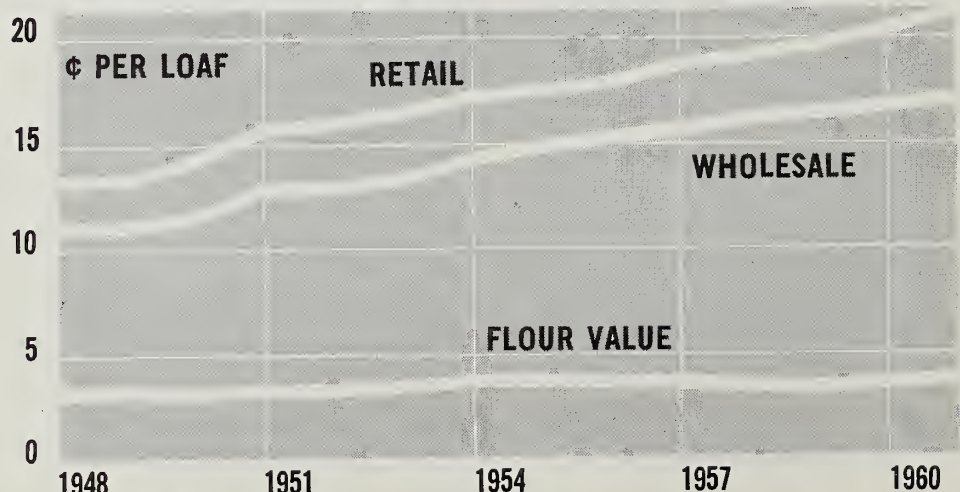
raise the volume of delivery routes and to free the salesman from many of the chores he now handles.

One way might be to develop a drop, or wholesale, delivery system, under which the deliveryman, using a much larger truck, would simply leave the desired amount of bread with the grocer. The store would handle its own display and the grocer would be billed at the end of the month. A study to determine the efficiency of various delivery systems has been initiated by the Economic Research Service.

Another long-range approach to improving efficiency might be the development of frozen bread products. Department economists are currently completing a study to evaluate the market potential for frozen bread and bakery products.

Should these frozen products meet with consumer approval, bakeries may consider reorganizing along this approach, for although the expenses for refrigerated trucks and display counters would be higher, delivery costs would be greatly reduced. Bread could be delivered only once or twice a week instead of two or three times per day, the current practice.

WHITE BREAD PRICES: The wholesale share was 56 per cent of the 1961 retail price of white bread, nearly double the 1947 figure. The cost of delivery is a large part of the wholesale margin.



U. S. Department of Agriculture

Neg. ERS 1449-62(9) Economic Research Service

SCHOOL LUNCH SURVEY RATES SIZE OF MARKET

Some 6,000 public and private elementary and secondary schools in the United States were sent questionnaires in September concerning school lunch programs.

The Economic Research Service and the Bureau of the Census are cooperating in a study of such programs to determine the number of schools offering lunches, types of programs offered and quantities of foods consumed. From the returns, ERS will choose a smaller number of schools with lunch facilities on which to base a study of the school food market.

In the last few years, school lunch programs have provided a growing outlet for the nation's agricultural abundance. During 1961-62, food valued at approximately \$800 million was used in serving school lunches. Those meals were served in nonprofit lunchrooms in elementary and secondary schools participating in the USDA's National School Lunch Program. Lunches and a la carte food services offered outside the program further expanded the school market for food.

More and more schools each year are providing lunch programs for their students. A 1957-58 study, based on public schools only, shows

that approximately 54,000 elementary and secondary schools were offering lunches under the National School Lunch Program. Another 6,000 offered food services not connected with the program. The remaining schools, about 45,000, either offered milk alone or no food services whatever.

During the school year 1961-62, nearly 65,000 public and private schools were participating in the National School Lunch Program alone. And this gain occurred during a period when the total number of public schools dropped slightly, due primarily to consolidations.

By 1963, it is estimated that there will be less than a hundred school systems in all cities of more than 10,000 which will not offer lunch facilities in some schools.

Despite the progress, as many as 10 million children still do not have school lunches available. Many of these children live in areas of economic hardship or in older urban areas where schools were not built to accommodate kitchens. Therefore, much of the potential for future expansion of school feeding will be in areas which pose special problems in food preparation and program financing.

SUPER-CONCENTRATED JUICE WINS BUYER FAVOR

First it was concentrated. Now it's super-concentrated. A new super-concentrated apple juice takes six cans of water to reconstitute, unlike most frozen fruit juices which take only three.

Tested over a 10-week period in retail stores in Fort Wayne, Indiana, the concentrate drew top marks from customers on flavor.

USDA researchers found the product ranked fourth in sales among 24 frozen juices during a four-week promotion period. After promotion, sales still maintained seventh place.

For processors, the concentrate's smaller bulk should save money on packaging, handling and shipping. These advantages should about offset production costs that may well be higher initially than for single-strength and 3-to-1 frozen juices.

The high degree of concentration of the product enables the processor to package a 100 per cent apple juice which needs no added preservative to maintain quality.

This high concentration also means that the super-concentrate stays liquid in the freezer and can be immediately reconstituted.

Bible Food, New Mode

American housewives are being offered a new convenience food, straight out of Biblical times.

The new product, Redi-wheat, is a dressed up version of the Middle East's bulgur, or pilaff. It's canned, cooked, debranned wheat, seasoned or unseasoned. Kansas wheat producers, with help from USDA, introduced the product successfully last year in a market test.

Recent studies of consumer purchases of the new-old bulgur showed that it outsold 6 out of 10 comparable products and that purchasers were well satisfied.

The new wheat product stores for months and is easy to prepare in a wide variety of recipes when it comes off the shelf.

Study of Tart Cherries Cites Producer-Processor Dependence

Producers of red tart cherries depend more on processors than growers of any other tree-fruit crop. Only 5 per cent of the entire U.S. crop now comes to the table fresh, according to a cooperative study by Michigan State University and ERS.

Tart cherries have always been chiefly a processed item. Even in 1938 only 30 per cent of the crop was marketed fresh. Today, about 95 per cent of the crop is processed—a greater percentage than for any other major tree-fruit.

Ease of storage of the processed product makes it possible to sell the fruit on a year-around basis.

This has resulted in the opening of new markets for tart cherries.

Michigan, the leading producer, processes more than 60 per cent of all U.S.-grown tart cherries.

Proximity to market and lack of competing tree-fruits in some producing areas are chiefly responsible for this lead.

Most tart cherry production is marketed wholesale, with approximately half packed in 30-pound frozen tins.

FARM PRODUCTS PROMOTION NEEDS RETAIL HELP

To get the most from their promotion dollar, farm products groups should work for active support from food retailers.

That's the indication of a preliminary market study of a promotional program for winter pears.

The study suggests that two good ways to get the needed support are store demonstrations and dealer contests.

When compared with no promotion, these plans increased sales more than 20 per cent.

Market development specialists in the Economic Research Service cooperated with the Oregon-Washington-California Pear Bureau in the study. Tests were made in Cleveland, Baltimore, Milwaukee,

Houston and Atlanta in the winter of 1961-62.

The study also covered media advertising of low intensity and point-of-purchase displays.

When used as the only promotion devices, they had little or no effect on sales, largely because of a lack of follow-through by the retailers themselves.

The effectiveness of store demonstrations and dealer contests was largely due to retailer support.

When these promotion techniques were used, retailers devoted more display space to pears, gave them more space in their own newspaper advertisements and featured pears at a lower price than they did when there was "no promotion."

Food Chains Dominate the Retail Sales of Eggs In Recent Study of Five Eastern Market Areas

Food chains accounted for 45 to 60 per cent of retail sales of eggs in five eastern market areas, according to a recent survey of shell egg movements into retail channels.

The study covered retail sales and the movement into retail channels of shell eggs in Baltimore, Pittsburgh, New York, Philadelphia and Boston in 1960.

Independent grocers, the second most important retail outlet for shell eggs, commanded 15 per cent of the market in Boston to 32 per cent in Pittsburgh.

Wholesale distributors sold to such institutional outlets as hotels, restaurants and hospitals as well as through their own retail routes and stores, and independent and chain food stores.

Food chains had the greatest share of retail sales of eggs in Boston, with 60 per cent of the market, and the smallest share in Philadelphia, with 45 per cent of the market.

More than 70 per cent of all shell

eggs moved through retail outlets already graded, candled and cartoned. More than 67 per cent of the cartoned eggs were processed by the metropolitan area firms, rather than by egg assemblers in the country.

The study of shell eggs moving into retail channels in the five eastern cities is third in a series, originally begun in 1959, in the Chicago area. The series continued with a report on egg marketing channels in Los Angeles, San Francisco, Seattle and Portland-Vancouver. Other cities will eventually be added until the series of reports takes in all eighteen cities where USDA has studied egg marketing channels.

A weekly report has been released that includes data from all firms that handle 100 or more unduplicated cases of eggs a week in the five cities. In New York 301 firms satisfied the requirements summarized above: Philadelphia offered 51 firms reporting; Pittsburgh, 36; Boston, 41; and Baltimore, 29.

Modern Packaging Helps Sell Produce in Self-Help Stores

It's the package that often clinches the sale in today's largely self-service food stores.

Studies over the past few years have shown what the proper use of packaging can do in the produce department, where less use of this sales device has been made than for most other products handled.

One study of retail handling of oranges, for example, showed that sales increased nearly 60 per cent when the oranges were displayed in packages or in a combination of bulk and packages, compared with purely bulk displays.

Packaging alone, however, isn't enough. Packages must be tailored to the customers' desires.

In one study, carrot sales increased considerably when offered in 1- and 2-pound packages, instead of just 1-pound packages.

Another market test showed that sales of dates were up 16 per cent when displayed in 12- and 24-ounce packages, instead of just the 12-ounce package. And when 36-ounce packages were added to the displays, sales climbed by 61 per cent.

Transparency can also add to the sales appeal of a product, though it depends on the product.

In one study, sales of tomatoes in plastic tubes were nearly 10 per cent higher than they were when the tomatoes were displayed in cardboard tubes, even though the tomatoes in plastic tubes carried a 3-cent premium.

However, the results were not so happy when the appearance of the produce was not up to par. High-visibility packages actually decreased sales for unwashed potatoes.

Inventive displays, wise pricing, pricing units, judicious use of space, aisle indexing and in-store promotions also contribute to good self-service merchandising. But packaging is often the factor that impels the customer to buy.

Commonwealth Nations Develop New Trade Outside Association

While the United Kingdom negotiates for membership in the European Economic Community, the constellation of independent member-nations and dependent territories forming the British Commonwealth has already developed important new trade patterns.

Commonwealth members are even now doing more business outside the Commonwealth than they did just a few years ago, according to a new ERS report. Members are the United Kingdom, Canada, Australia, New Zealand, India, Pakistan, Ceylon, Nigeria, Ghana, Tanganyika, the Federation of Malaya, Cyprus, Sierra Leone, Jamaica, Trinidad-Tobago and Uganda.

Commonwealth trade has increased greatly with Western Europe, the United States and Japan. Exports of the principal Commonwealth agricultural products to Common Market countries rose from less than 10 per cent of all of these agricultural exports in 1938 to 20 per cent in 1961. The percentage of all major farm exports from the Commonwealth going to the United Kingdom declined from 37 per cent in 1958 to 30 per cent in 1961.

Both the old and new Commonwealth members are looking more and more for new markets through new trade channels. Increasingly, the overseas members and territories are processing their own farm products and selling them directly to foreign customers instead of through London and Liverpool markets. For example, India now processes its own cotton and sells the cloth. Ghana sells its cocoa direct to the U.S. through agents in Accra.

Striking political and economic changes have taken place since the beginning of World War II. Today's Commonwealth is a free association of nations held together only by mutual self-interest. There

is less emphasis upon preferential treatment of Commonwealth trade and more on economic development.

In line with the new Commonwealth relationships, promising British territories such as Tanganyika and Sierra Leone were encouraged to develop political and economic responsibility. Both are now full members of the Commonwealth.

The Commonwealth is especially encouraging economic development and social improvement among under-developed members. These emerging countries have turned to

the United States and Western Europe for a large part of the foreign capital and technical assistance they need. Between 1951 and 1961, U.S. economic and technical assistance to Ceylon, India, Malaya and Pakistan alone totaled \$4.6 billion.

If the United Kingdom joins the Common Market, other Commonwealth countries are expected to make a three-way effort to retain their outlet in the United Kingdom, expand their markets in other EEC countries and increase exports to non-market countries as well.

NEW REFORM LAW UPDATES FRENCH HISTORY

Allons! Let's get moving!

This, in effect, is what France with its new agrarian reform law is telling agriculture.

With long-range prospects for higher farm production and income already brighter as trade among Common Market members picks up, France feels now is the time to modernize its agricultural structure.

A century and a half after Waterloo, French agriculture is still being fragmented by inheritance laws that Napoleon put on the books. For five generations French farms have been divided and subdivided equally among male heirs until 79 per cent of all farms are now smaller than 50 acres, 17 per cent less than five acres. In the United States, by contrast, only 28 per cent of farms are under 50 acres. However, France is better off in over-all average farm size than Belgium, West Germany or Italy.

Despite the fact that such small-scale farms are basically uneconomical to operate, 20 per cent of the French population still lives by farming, contributing only 10 per cent of the national income.

Under the new law, every region in France will have a land management agency under joint public-private direction. These agencies will have the right to pre-empt land as it comes on the market, consoli-

date small holdings and resell the larger units on terms favorable to the buyer.

The government will also have the right to take over fallow land, some 10.6 million acres where owners are unknown or taxes have not been paid for five years.

While consolidating small farms, the law will also restrict the size of large estates by limiting the number of acres a single farmer or farm group can own or operate.

In the wake of last summer's "artichoke wars" in Brittany, set off when a few producers undersold the majority, farmers now get a "closed shop," if they want it, to set farm prices and production quotas. According to the law, if 70 per cent of an area's producers can agree on price floors and production quotas for farm products, the remaining producers will have to go along.

Vertical integration in agriculture is also out, at least until 1971. A butcher or sausage maker, for example, will not be allowed to raise his own pigs for slaughter. Just such a case touched off another demonstration last summer by 1,000 Breton hog producers.

Finally, the new reform law provides government funds to pension off elderly farmers and make way for younger men. Farmers will be retrained for other lines of work.

U.S. EXPORTS AND THE E.E.C.

U.S. Trade Expansion Act Strengthens Our Bargaining Power for Farm Exports

With no import duties, Dutch cheeses will be cheaper in Rome. With no import quotas, Italian fruits and vegetable can enter West Germany in unlimited quantity. As personal income rises, Belgians will be buying more meat, stimulating livestock production in France.

These are just examples of what free trade will mean if the European Common Market's new agricultural policy, in effect since July, succeeds in eliminating trade barriers among Market members—France, West Germany, Italy, the Netherlands, Belgium and Luxembourg.

Intricate national systems of import taxes and quotas, marketing monopolies, restricted importing periods and other trade controls have hampered Europe's internal trade for centuries. So far as the Common Market is concerned, they are all slated to go in the next seven and a half years.

Free trade will undoubtedly increase the demand for farm products and encourage higher farm production within the Market. On the other hand, as tariff walls crumble within the Market, new ones are being raised against imports from non-members including the United States.

What's more, the Market's upcoming free trade privileges may be extended to almost all of Western Europe in the near future. Almost every nation this side of the Iron Curtain has asked for some sort of Common Market membership or shown interest in closer trade ties.

What, then, is going to happen to U.S. markets for agricultural commodities in Western Europe? Since the Common Market is our biggest and best overseas customer, for farm products as well as industrial goods, the market outlook is of major importance to U.S. farmers.

It's still too early to say for sure. Based on the best information available, however, ERS foreign specialists have just completed a study of the market potential for U.S. commodities to the present Six plus Greece, the only associate so far, and to an expanded 16-member Common Market. ("U.S. Agricultural Trade with the European Common Market" appeared in the October issue of *Foreign Agricultural Trade of the United States*.)

As guidelines to future trade, the study reviews our farm exports to the six-member Market for the last five years. Greece is included in the study even though our agricultural trade with it is relatively small.

To the Six and Greece, ERS economists added our trade with nine potential members. They are the United Kingdom, Norway, Denmark, and Ireland, the full member applicants, and Austria, Sweden, Switzerland, Spain and Turkey, all of which have asked for some form of association.

Not included are the new nations, mostly in Africa, that have Common Market trade privileges carried over from the days when they were dependencies of France, the Netherlands and Belgium. Also excluded are certain advanced Commonwealth countries that may get concessions during a transitional period if the United Kingdom joins the Market as expected.

The study shows that the Common Market, as it now stands, is far and away our largest dollar market for farm products abroad. Last year it accounted for almost one-third of all our dollar exports. Total U.S. shipments to the Market in 1961 came to \$1.1 billion. Over 90 percent were dollar sales, nearly one-third higher than in 1957, the

year the Six signed the Treaty of Rome which established the Community.

Among potential members, the United Kingdom is our biggest market. Last year the U.K. imported U.S. agricultural products valued at \$431 million—about half of all our farm shipments to the nine potential Common Market members. By contrast, Spain took \$154 million in U.S. farm products, Austria \$20 million.

Whether the Common Market expands or not, access for U.S. farm products depends on two all important factors: First, how the Community carries out its Common Agricultural Policy and second, what concessions the U.S. is able to obtain, including help from our own new Trade Expansion Act.

Until 1970 the Common Agricultural Policy imposes a levy on intra-Market trade of such commodities as grains, poultry, eggs, pork, fruit and vegetables and wine.

During this transitional period the import levy will bridge the gap between the target (desired goal) price in the importing country and the wholesale market price in the exporting country. From 1970 on, these commodities will move freely throughout the Common Market.

However, the Common Agricultural Policy also imposes levies, generally higher than those of individual Market countries, on imports from non-members, including the United States. These levies remain in effect after 1970, and may make it harder for some U.S. farm products to compete.

As for U.S. exports of wheat and flour, the levy imposed last July 30 will not really be felt until after the 1963 harvest. The Common Market can't increase wheat acreage before then. Also, the Community depends on outside sources for nearly all quality wheat. So it would seem that there would be no restrictions on this type of wheat imports from non-members. As long as the U.S. can supply this quality, market prospects appear favorable.

However, in contrast to fairly low duties in the past, the levy on wheat flour to the Netherlands toward the end of July was \$43 a ton. A levy this high could be a strong deterrent to U.S. flour exports.

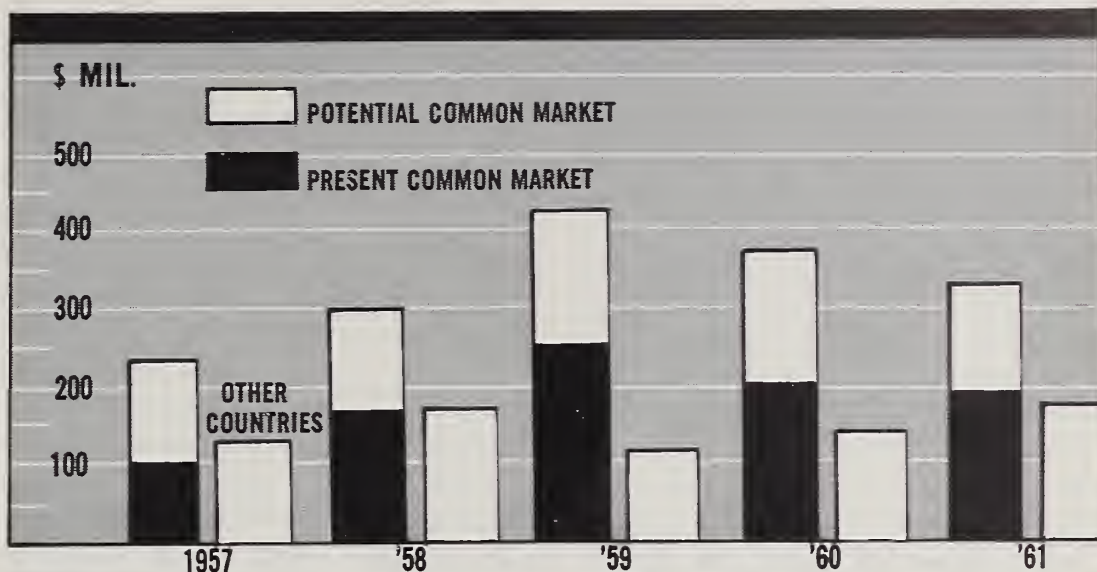
As with wheat, U.S. exports of feed grains will not be affected by the new levies until after the 1963 harvest, and for the same reason. The Market's own production of feed grains is not rising fast enough to meet growing livestock needs, and it has to rely heavily on imports. The long-term outlook for U.S. exports depends largely on the target prices set yearly by Market members. High target prices would encourage the Community's own production and discourage imports. Low target prices, of course, would have a reverse effect.

Common Market prices for imported poultry will probably be considerably higher under the levy system, especially in West Germany, the leading market for U.S. poultry. Up to now we've been able to sell poultry in Europe at lower prices than it can be produced there. If the levies are markedly higher than the old individual country tariffs, the U.S. may find it hard to maintain the recent upward trend in poultry exports.

Regulations to carry out the Common Agricultural Policy on rice have not yet been adopted.

Our trade position may become more favorable under the new U.S. Trade Expansion Act. The act gives us much broader negotiating authority than we had before. Under previous legislation we got important concessions from the Common Market.

The new act gives us the power to further reduce our own tariffs on imports from the Common Market in exchange for greater access to their markets.



FEED GRAINS: The present and potential members of the Common Market represent the major foreign outlets for U.S. feed grains. As more countries share Market benefits, higher per capita income in member countries will generate greater demand for meat, increasing feed grain use.

U. S. Department of Agriculture

Neg. ERS 1451-62(9) Economic Research Service

EUROPEAN COMMON MARKET—Who's In? Who's Applied?

Forty-six Nations and Territories Now Have or Ask Trade Ties

Present Members: France,* Italy,* Netherlands,* West Germany,* Belgium-Luxembourg*

Present Associate: Greece

Member Applicants: Denmark, Ireland, Norway, United Kingdom*

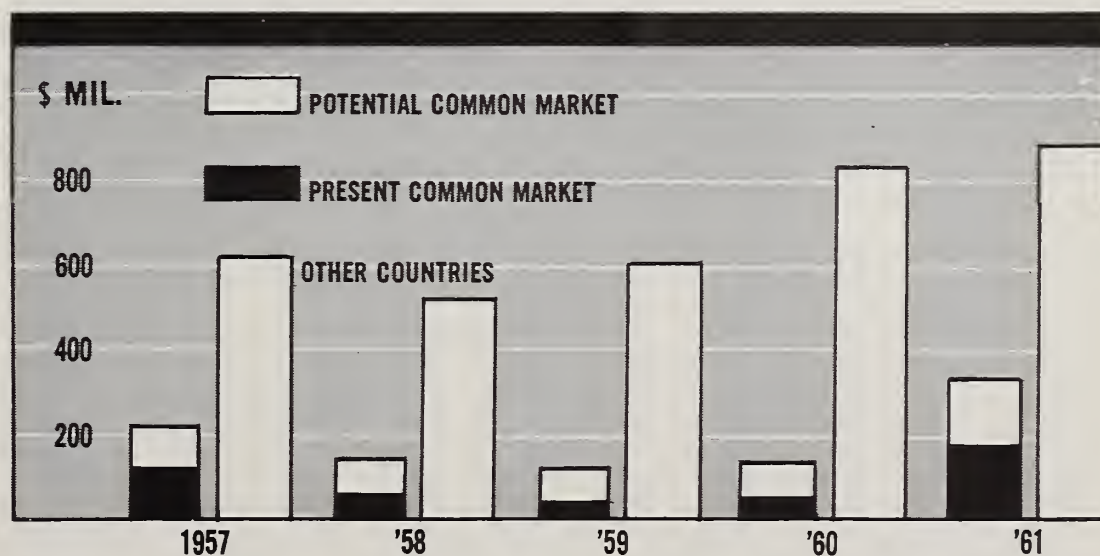
Associate Member Applicants: Austria, Spain,* Sweden, Switzerland, Turkey

Closer Trade Ties Requested (type of association undetermined): Iran, Israel, Portugal

Present Independent African Affiliates: Burundi, Chad, Cameroun, Central African Rep., Congo (Brazzaville), Congo (Leopoldville), Dahomey, Gabon, Ivory Coast, Malagasy Rep., Mali, Mauritania, Niger, Rwanda, Senegal, Somali, Togo, Upper Volta

Present Dependent Affiliates: Fr. Polynesia, Fr. Somaliland, Fr. So. & Antarctic Ter., St. Pierre & Miquelon (Fr.), Ter. of Comores (Fr.), Neth. New Guinea, Neth. Antilles (req.), Surinam (req.)

*Imports of U.S. farm products exceeded \$100 million in 1961.



WHEAT AND FLOUR: U.S. exports to the Common Market, though smaller than to other countries, actually tripled last year, but future levels may be reduced.

U. S. Department of Agriculture

Neg. ERS 1452-62(9) Economic Research Service

MACHINERY LACK HINDERS SOVIET AGRICULTURE

"One cannot demand high productivity of labor—and hack corn with an axe."

With this statement Khrushchev put his finger on one of many reasons for Soviet agriculture's poor showing in the last three years or so. Farmers just don't have enough tractors, combines, field forage harvesters or trucks to handle state farms, which average 22,000 sown acres, or even the collective farms which run close to 6,800 sown acres.

What's more, according to a recent ERS study, the managers of the collective and state farms can't get spare parts to keep the machinery they do have running. Khrushchev has admitted that much of the 1959 grain crop in Kazakhstan went unharvested because some 32,000 combines and 11,000 reapers were idled for repairs. Poor care of machinery has now been made a criminal offense throughout the USSR.

Although climate is a serious problem, Communist policy is much to blame for current food shortages and rising consumer prices. Heavy industry still gets first call on government funds. As recently as 1960, for example, the Kremlin invested 12.3 billion rubles in heavy industry while agriculture got only 5.6 billion. Last spring the gov-

ernment raised prices paid farmers for such staples as meat and butter, but these increases were paid for by drastically raising consumer prices.

Petty interference by local party-state bureaucrats and rigid government farm programs inherited from the Stalin era have also contributed to agriculture's problems.

One Stalin holdover, for example, is the practice of imposing on farmers from the Polish border all the way to the Chinese border the use of the same farm methods and crop patterns.

The government has had to back-track somewhat on its drive to increase production by cultivating new lands. The arid soils of the East have not responded as hoped to the "virgin lands" development program. Now policymakers plan to concentrate on raising yields on present acreage. A promised large-scale irrigation program, if and when it is developed, should help, but real results are still years off.

Meanwhile, private "acre-and-a-cow" farm plots, making up only 3 to 4 per cent of sown acreage, produce, with some contribution of feed from the collective sector, nearly half of Russia's meat and milk, over 80 per cent of the eggs, 46 per cent of the green vegetables and over 60 per cent of all potatoes.

Red China Shifts Economic Policy As Hunger Stalks Year of Tiger

The threat of hunger is dictating economic policy in Communist China.

Mismanagement on the collective farms and three bad crop years in a row have brought Red China perilously close to mass famine. The government has been forced, at least temporarily, to modify its "industry first" policy in favor of agriculture.

Although the Chinese have one of the world's poorest diets, Communist China until the last two years or so has been a major world exporter of farm products while imports of food were restricted.

Peiping's purpose in imposing this one-way farm trade, according to a new ERS study, was to make agriculture pay for industrial development. Scarce foreign exchange was used almost entirely to buy machinery and other industrial items. Until heavy industry was strong enough to help finance improvements in agriculture, the Communist regime reasoned, some 600 to 700 million Chinese could get along on what food their own poorly equipped collective farms produced.

Failure of Communist programs forced Peiping to buy for cash or credit between 6 and 6.5 million tons of grain for delivery in 1961, mostly from Canada and Australia.

Imports are continuing as 1962, the Year of the Tiger, draws to a close with hunger still stalking the land.

At home, the Chinese government has diverted capital from heavy industry in an effort to upgrade agricultural methods and increase food production. Moreover, many foodstuffs usually earmarked for export markets are being held for domestic consumption.

Peiping's policy shift has inadvertently helped to step up U.S. exports of some commodities. U.S. soybean exports have benefited because Red China has cut back soybean exports.

SOVIET FARM MACHINERY NEEDS

Implements	U.S.A.	U.S.S.R.	
	January 1, 1962	January 1, 1962	Requirements ¹
	Thousand units		
Tractors	4,770	1,168	2,696
Grain combines	1,065	503	845
Silage harvesters	285	121	257
Trucks	3,110	790	1,650
Tractor trailers	² 4,400	292	820
Tractor-drawn ploughs	² 2,750	784	1,180

¹ For performance of farm operations during optimum periods. ² Jan. 1, 1957.

U.S. Government Aid Programs for Farm Exports Are a Boost to Balance of Payments Accounts

About one-third of the \$5.1 billion record farm exports of fiscal 1962 went abroad under various government assistance programs. What good do they do our balance of payments? Quite a lot.

Take fiscal '61 as an example—the latest year that export figures can be broken out.

Farm exports in that year earned \$4.9 billion—roughly a fourth of total merchandise exports for the year. Some \$1.5 billion of the total were government assisted.

About \$1 billion of that figure represented exports exchanged for foreign currencies under Title I of PL 480. An additional half-billion was donated under Titles II and III of the same law.

The value of donated farm exports and the transportation cost are recorded as dollar receipts, a credit. They are offset by a recorded payment, or debit, in the U.S. government grant account. Net effect on the balance of payments: zero.

About \$500 million of the foreign currencies generated in fiscal '61 were used to finance part of the U.S. government military and economic assistance programs abroad—without charge to dollar appropriations. To put it another way, it's half a billion dollars worth of foreign purchases that don't weigh against us in the international accounts. The biggest share of this money went for foreign loans and economic grants.

The breakdown shows \$8 million went for military expenditures, \$11 million for various government purchases, \$104 million for economic grants and \$379 million for loans abroad.

About \$100 million more was bought by various U.S. government agencies to pay for diplomatic and other foreign operations. Such shifting of funds within the U.S. government helped prevent the

movement abroad of additional dollars.

The remaining \$400 million was an unused balance which could be applied to the expenses in the next fiscal year.

All together we had \$600 million working for us in our balance of payments in fiscal 1961. We had an additional \$400 million as an unused balance, and another half billion which had no effect at all.

Needless to say, the remaining \$3.4 billion of farm exports was strictly a credit to our international account.

Role of Development Credit Banks in Economic Growth To Be Probed

ERS foreign specialists are getting ready to study agricultural development banks, and their impact on the economic growth of emerging nations. It's a new project of the Development and Trade Analysis Division.

The countries selected for study are Turkey, Greece, Israel and Yugoslavia.

One of the main purposes of the study will be to determine how much credit is actually available through the agricultural banks, and how the credit is used.

Though information is already available about both industrial and agricultural development banks, there is little detailed analysis of the impact of the banks on the local economy, especially in the agricultural sector.

Among other factors studied will be the quality of management and the amount of freedom from political influence, which vary widely from country to country. The Development Bank in the planned Marxian economy of Yugoslavia obviously differs in many ways from the development banks in other countries.

Tiny Lebanon Is Big Purchaser Of Wheat and Flour from U.S.

Lebanon, a country about half the size of Massachusetts with a population of 1.6 million people, is a small but important customer.

In 1961, U.S. exports to Lebanon amounted to \$45 million. About one-fifth of the total was farm products, with wheat and wheat flour the principal products.

In the past few years, only the United Kingdom supplied more products by value to Lebanon.

U.S. imports from Lebanon, at \$3.8 million in 1961, were less than a tenth of our exports to the country. Agricultural goods made up the bulk of the imports from Lebanon in 1961 with wool and tobacco the major commodities.

The overall output of Lebanese agriculture should rise moderately in the next few years, largely because of a continuing changeover to intensive crop and livestock production. The Lebanese government is also encouraging small-scale farmers to consolidate their holdings into more efficient units.

The Lebanese government currently uses few trade barriers to protect domestic farm production.

Grain in Spain

The 1962 harvest of wheat in Spain, estimated at 5.2 million tons, breaks a two-year run of drastically reduced crops and should make the country self-sufficient in this food grain for the coming year.

This year's harvest is expected to run about 46 per cent above 1961 and may give the country a slight margin for export. Any export wheat from Spain is likely to be in hard wheat.

Spain has recently had to import large amounts of wheat from the United States. In the 1961-62 shipping season, the U.S. exported 655,000 tons of wheat to Spain, of which 182,000 tons were under U.S. government assistance programs.

Both CAFTA and LAFTA Promise Freer Trade Among Members of the Two Latin American Groups

Free trade among member countries. Programs to integrate economic development throughout the community.

Sound like the Common Market?

It is—the *Central American Common Market*, better known as the *Central American Free Trade Area* or *CAFTA*. Members are Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua.

What's more, eight South American countries, plus Mexico, have set up machinery for still another "Common Market." The *Latin American Free Trade Area*, or *LAFTA*, is open to any country south of the Rio Grande. Present members are Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru and Uruguay.

Under *CAFTA'S* General Treaty, signed by newest member

Costa Rica in July, members will grant one another increasingly free access to their markets for all products originating within the free trade area. Some items start moving "free" immediately. Certain others will automatically get free entry within five years.

Members have also agreed to equalize duties on imports from non-members. The United States is the biggest supplier of farm products to these countries.

In 1961, U.S. agricultural exports to the *CAFTA* area totaled \$28 million with agricultural imports from the area of \$173 million.

The nine *LAFTA* countries also plan a phase-out of internal trade restrictions somewhat similar to the *Central American* group. Free trade among members is to become fully effective within 12 years.

Import duties will gradually be eliminated for items produced and traded within the area by use of two types of tariff schedules. *National* schedules will be set up by each country every year. *Common* schedules will be applicable to all countries every three years.

Duty reductions will apply to internal trade only. Reductions must average at least 8 per cent a year in terms of total internal trade, measured against similar duty levels for imports from nonmembers.

The United States exported to *LAFTA* farm products valued at \$279 million in 1961. From *LAFTA*, we took \$1,224 million in agricultural commodities.

Farm Exports to Latin America Up \$27 Million for Fiscal 1962

Preliminary figures show that our farm exports to the Latin American republics, in the year ending June 30, were \$27 million above last year. Total exports amounted to \$415 million of which almost 40 per cent was wheat.

Because we buy Latin American coffee, cocoa, bananas and other commodities we don't grow here, farm imports from the area are traditionally larger than our exports.

However, imports were down \$87 million in fiscal 1962 from the year before.

Brazil replaced Venezuela as our top market, taking goods valued at \$106.5 million, \$37 million more than last fiscal year. Exports of wheat to Brazil went up from \$65 million in 1961 to \$90 million. The Brazilians were assisted by U.S. export programs.

Venezuela was second with \$87 million, and our top dollar market in Latin America. Mexico was third with shipments totaling \$56.6 million and our second largest dollar market.

Wheat shipped under government programs accounted for the increase in exports to Peru, Chile, Bolivia, Haiti and Paraguay.

U.S. EXPORTED MORE FARM PRODUCTS, IMPORTED LESS FROM LATIN AMERICA IN 1961-62

Country	U.S. EXPORTS		U.S. IMPORTS	
	1960-61	1961-62*	1960-61	1961-62*
	Thousand dollars		Thousand dollars	
Mexico	62,417	56,609	260,436	274,284
Guatemala	8,992	9,865	57,562	50,759
El Salvador	5,472	6,194	24,019	36,975
Honduras	4,089	3,605	32,239	27,227
Nicaragua	2,921	4,190	24,675	22,385
Costa Rica	5,472	5,124	39,324	35,719
Panama	9,403	10,255	13,254	13,193
Cuba	41,134	360	72,669	22,659
Haiti	6,341	9,394	12,581	14,275
Dom. Rep	2,706	4,509	109,802	98,789
Colombia	25,001	27,356	260,059	207,445
Venezuela	83,096	86,638	24,548	14,022
Ecuador	7,537	6,548	55,431	48,085
Peru	17,439	24,108	79,146	94,747
Bolivia	6,497	8,428	1,796	1,695
Chile	21,259	33,614	4,766	5,411
Brazil	69,756	106,542	470,542	484,709
Paraguay	978	4,867	6,883	5,935
Uruguay	4,940	4,053	16,845	20,117
Argentina	2,914	2,673	84,897	85,693
Total.....	388,364	414,932	1,651,474	1,564,124
*Preliminary				

*Clothing purchases shift for many reasons,
but textile industry finds money is the biggest factor*

SPENDING MORE MONEY FOR CLOTHING

More money in the family budget this year? Then the chances are there are more clothes hanging in the closet.

How much money we have is the most direct measure of how much clothing we are apt to buy, according to the economists. It's a two-part measure—the amount of money we have to spend, and the difference between what we have this year compared with last. More money, more clothes.

And, of course, the more clothes we buy, the happier the cotton and wool producers are, not to mention all the rest of the textile industry. With about 40 per cent of all fiber production going into clothing, it makes a big difference to the industry whether we decide to spruce up our wardrobes with a new dress or suit, or choose, instead, to make do with what we have for another season.

And then there is price. It does make a difference. Who can pass up a bargain?

The money we have to spend, the price of clothing and the supply on the rack—these are the most important gauges that tell the economists—and the industry—how much clothing we should be buying during the year.

There are other measures, however, which though harder to pin down, have a lot to do with our clothing purchases.

Style and fashion lead the list. When a new style hits the fashion pages, we may find our clothing budgets stretching a bit. New fibers, also, may tempt us to spend a little more money on clothing.

The way we live is apt to change our wardrobes, too. Well heated homes and cars result in new styles

and lighter weights for winter clothing.

When the farmer moves to the city, he exchanges overalls for a business suit. When he moves back out to suburbia he gets back into comfortable slacks for patio living.

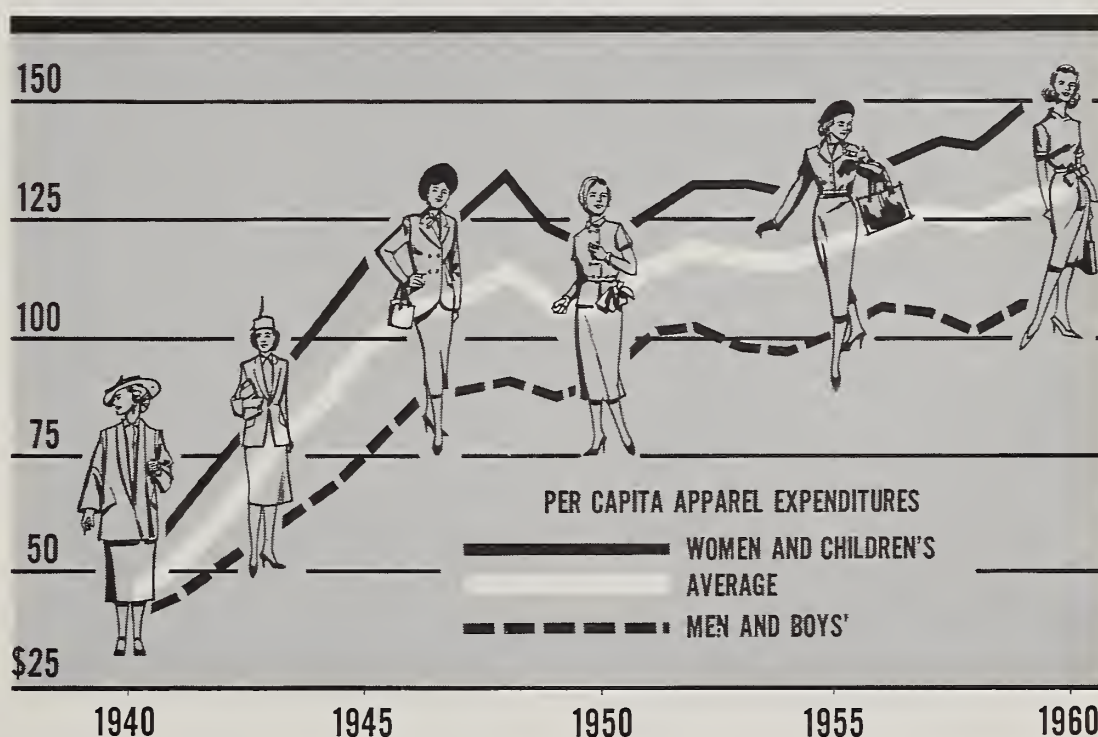
Age has a lot to do with the size of our wardrobes, and nationally it is even more important. The very old and the very young get along with less clothing than the rest of us. And within the last 20 years there has been a considerable increase in the proportion of the population under 14 and over 60.

These are the changes the textile industry watches closely. Not so much because of an increase or decrease in the total amount of fiber we use, but because of the changes in the kinds of fiber.

Back in 1940, for example, use of textile fibers in the U.S. amounted to just under 36 pounds per person annually. Today the use of textile fibers in our wardrobes has changed considerably.

In 1940 we used about 29 pounds of cotton per person during the year. Last year the figure was a little over 23 pounds. Wool has stayed at about 3 pounds per person over the 20-year period. We are using about 10 pounds of manmade fibers these days compared with something less than 4 pounds 20 years ago.

In some sweaters, for example, synthetic fibers have totally displaced wool. For other purposes, such as regular-weight men's and boys' suits, manmade fibers are blended with wool.



PER PERSON SPENDING FOR CLOTHES: Spending for clothes has risen steadily over the past two decades. For women and children (including boys under five), clothing averaged \$150 in 1960; for men and boys, \$109. Combined, per capita spending averaged \$131.

U.S. Department of Agriculture

Neg. ERS 1450-62(9) Economic Research Service

BUYERS OF FROZEN ORANGE JUICE SURVEYED

Is frozen orange concentrate frequently on your grocery list? If the answer is yes, there is a better than even chance that you live in the Northeast and in a city of over a half-million population.

These are a couple of the points picked up in a recent ERS survey of consumer purchases of fruit juices.

The study also showed that the person who buys the most orange concentrate is apt to belong to a small and slightly older family, a family with a little more money than most and one that doesn't have any children at home.

The survey was made during the spring and summer of 1961. Its rundown of who buys orange concentrate showed little change in purchasing habits from a similar study made in the early 1950s.

Of the families buying fruit juices and drinks, orange concen-

trate accounted for more than one-third of their purchases. The economists found that metropolitan families served orange concentrate once every five days on the average. In smaller cities or towns, people used frozen orange juice once every six or seven days; in the country, it was every eight days.

Frozen orange concentrate cost an average of 20 cents for a 6-ounce can in 1961, or just over 5 cents for a 6-ounce serving of the reconstituted juice. That's a cent and a half less a glass than it cost in 1950.

Reflecting its popularity with buyers, orange concentrate production in the 1961-62 season will top the previous season's record of 87 million gallons by more than a third.

That's a big jump for the familiar little cans of juice that started out with a total production of a half-million gallons in 1946.

Little Change Seen in Amount of Noncitrus Fruit Consumed by Average American in Past Few Years

Americans have been eating apples, pears, peaches and other noncitrus fruits at a fairly steady 115 pounds per person a year for the past few years. Noncitrus fruit made up 58 per cent of all fruits consumed by the civilian population in the past 11 years. Fruits other than citrus have taken a fairly constant share each year since 1950 while total fruit consumption per capita remained near a 200-pound level (fresh-equivalent weight) annually.

The noncitrus fruits are mostly deciduous but also include several tropical items, especially bananas and pineapples. Most of the deciduous fruits such as apples and pears are produced on the U.S. mainland. Total production of them has increased over the years, especially since the early 1950s. Hawaii is our chief supplier of pineapples and Central and South American coun-

tries supply most of our bananas.

During the 1950s, per capita consumption of fresh noncitrus fruit dropped a little. At the same time, use of processed forms increased enough to offset the loss. Last year, about 56 per cent of our fruit, other than citrus fruit, was eaten fresh and the rest canned, dried or frozen. Processed forms ranked as: canned fruit, 26 pounds; dried, 11 pounds; canned juice, 9 pounds; and frozen, 4 pounds.

In little more than a decade, fresh and dried fruits have lost ground to canned and frozen forms. During this period, output and quality of canned and frozen fruits and juices greatly improved. Transportation methods speeded up and made distribution faster. Storage was modernized and used more widely so that our fruit supplies could be kept in good quality for longer periods.

Fruit Drinks Popular

Purchases are votes of popularity and fruit juice drinks have been gaining in votes, especially since the mid-1950s. Retail prices per ounce are usually lower for these drinks than for full-strength juice and concentrates and have helped make them attractive to buyers.

Additional water is usually half or more of the contents—this distinguishes fruit drinks as a class from fruit juices.

Nature Gets a Helping Hand From Florida Citrus Industry

Customers seem to prefer orange oranges. At least they do in the Midwest where sales were recently compared for Florida oranges with and without color added.

When the two types of oranges were displayed side by side, sales for the color-added fruit were about twice those of the natural color oranges. When displayed separately, the color-added oranges outsold the natural oranges by 15 to 30 per cent.

However, when the same tests were made in Philadelphia, there was little difference in sales between the natural color and color-added oranges. And here again, the different tests were made with the oranges displayed separately as well as together.

The three-week tests were conducted in the two cities during the fall of 1959 and 1960 and the spring of 1961. The cities were selected as typical of midwestern and eastern markets.

About two-thirds of the Florida oranges sold each year for fresh consumption are artificially colored to give the fruit a more uniform color.

The coloring process costs about 5 cents a box. Coloring oranges cost the Florida citrus industry an estimated \$750,000 during the 1960-61 season.

RECENT PUBLICATIONS

Single copies of the following publications are available free from the Division of Information, MOS, U.S. Department of Agriculture, Washington 25, D.C.

THE AGRICULTURAL SITUATION IN 1961-62 IN THE SOVIET UNION AND OTHER EASTERN EUROPEAN COUNTRIES, Regional Analysis Division. ERS-Foreign-29.

Agricultural output in the Soviet Union and most other East European countries declined or fell short of the high official goals for last year. Serious food shortages developed in many of these countries. Prices paid to farmers for certain commodities were increased in the Soviet Union and some other East European countries, but prospects for the 1962 harvest make it unlikely that the agricultural and food difficulties will be over soon. Besides the Soviet Union, the report discusses the situation in Poland, Czechoslovakia, East Germany, Hungary, Rumania, Bulgaria and Yugoslavia.

RURAL RECREATION—A NEW FAMILY-FARM BUSINESS, a report of a Task Force of USDA on Income-Producing Recreation Enterprises on Farm Land. (Five agencies including ERS).

This report points out that there is a pressing need for increased recreation areas and facilities. It goes ahead to say that the nation's farm and ranch land can provide a large part of that need, with income to owners and satisfaction to users. The annual recreation expenditure has increased from less than \$4 billion in 1939 to well over \$20 billion today, and evidence indicates that this trend will continue. The report discusses the kinds of recreation enterprises adapted to farms and factors affecting development of these facilities.

COSTS OF CROP PRODUCTION BY SIZE OF FARM, CENTRAL COTTON-TOBACCO AREA OF NORTH CAROLINA, W. T. Chumney and James Vermeer, Farm Economics Division. Agricultural Economic Report No. 14.

Costs per pound of producing tobacco on large farms in the central cotton-tobacco area of North Carolina were 16 per cent lower than on small farms in the same area in 1956. For cotton, they were 20 per cent lower; for corn, 40 per cent lower; and for soybeans, oats and wheat, 50 per cent lower than on small farms. The conclusions were based on a study of 267 farms selected at random.

THE PECAN SHELLING AND PROCESSING INDUSTRY—PRACTICES, PROBLEMS, PROSPECTS, Jules V. Powell and Donn A. Reimund, Marketing Economics Division. Agricultural Economic Report No. 15.

The pecan shelling industry has grown from small, largely hand-operated side-line enterprises to large, highly automated businesses. This report is based on a survey of 74 firms that had net sales of 164 million pounds of pecans in 1960-61. The eight largest firms accounted for 48 per cent of the industry sales, and the 37 largest accounted for 90 per cent of the industry sales.

CHANGES IN FARM PRODUCTION AND EFFICIENCY—A SUMMARY REPORT, 1962, Farm Economics Division. Statistical Bulletin No. 233.

This is an annual publication designed to present the major statistical series on farm production, production inputs and efficiency. The data will help the user to get a historical perspective of what has happened and to measure current changes. (See p. 5, this issue.)

SAMPLING, CODING, AND STORING FLOOD PLAIN DATA, Brian J. L. Berry, Department of Geography, University of Chicago, under contract with USDA's Economic Research Service. Agriculture Handbook No. 237.

The report is concerned with methods of sampling, coding and storing data relating to the agricultural occupancy of flood plains. It describes a unique field method for punchcard coding and storing of geographic sample data from other sources.

GOVERNMENT'S ROLE IN PRICING FLUID MILK IN THE UNITED STATES, Economic and Statistical Analysis Division. ERS-63. (Reprinted from the Dairy Situation, DS-291, August 1962).

The federal government entered the fluid milk pricing field following passage of the Agricultural Adjustment Act in 1933. Expansion of the government's role was slow in the 1930s and 1940s but in the last 10 years has increased rapidly. As of July 1, 1962, a total of 83 federal milk marketing orders were in effect in the United States. This report discusses the development of federal milk marketing orders and summarizes central features of state milk control programs.

U.S. CENSUS OF AGRICULTURE: 1959—A GRAPHIC SUMMARY OF LAND UTILIZATION, prepared cooperatively by the U.S. Bureau of the Census, and the Farm Economics Division of USDA's Economic Research Service.

In graphic form this report presents some of the significant facts on the major uses of land; regional patterns of land resources and uses; conservation, improvement, and development of land; and farm resources and production.



Eleven-Plus Pounds of Glue Keep Us From Falling Apart

It's a sticky world. The economists tell us we use 2.1 billion pounds of glue and other adhesives a year, or 11.5 pounds per person, to keep our world from falling apart.

A lot of these adhesives do their work right in the home. Paper bags and envelopes, for example, call for 71 million pounds of adhesive a year. And then there are the handy pressure tapes, bookbindings and all those trading stamps.

You may be walking on adhesive, too. More and more soles of shoes are stuck together these days, instead of being stitched or nailed.

But far and away the greatest

amount of glue and adhesive goes into the buildings we work and live in. A three-bedroom, prefabricated house, for example, uses 150 to 175 pounds of adhesive. And in another 10 years, it's quite possible that three-quarters of all new homes will be largely factory built.

More adhesives at work mean more chances to sell farm products, since many of the old and new binders on the market are derived from a variety of starches and proteins produced on the farm.



From the Upper Nile

Close to two-thirds of Sudan's total dollar earnings come from trade with the United States. We buy Sudanese gum arabic, long staple cotton and hides and skins.

Trends for Canadian Farms Are Similar to U.S. Changes

Canadian farms, like their U.S. counterparts, seem to be getting fewer, bigger and more efficient. The Saskatchewan census reported 103,000 farms in 1956; 90,000 in 1961. The number of farm operators living in towns and cities is increasing. A check on land values on both sides of the international boundary, from North Dakota west to Medicine Hat, did not disclose much difference in land prices. Good medium- to heavy-textured wheat land was changing hands at \$50 to \$75 per acre on both sides of the border. An odd choice piece here and there was reported to have sold at prices up to \$100 per acre.